

GEOGRAPHIC NEWS BULLETINS

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

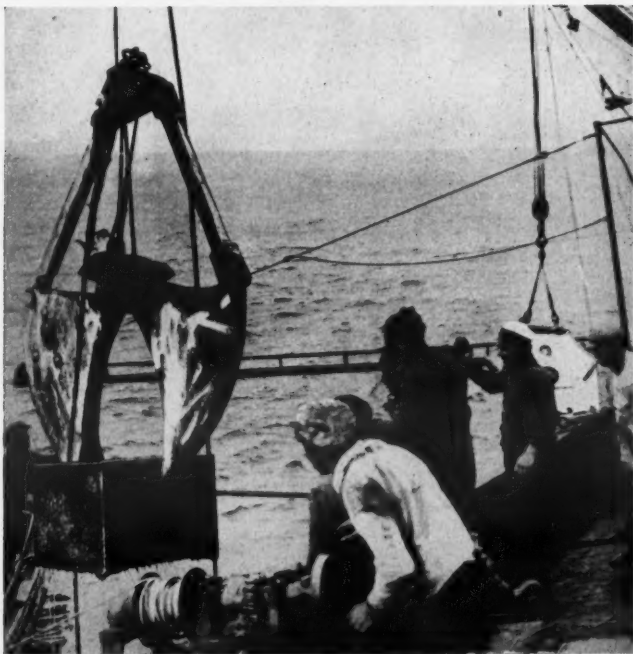
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General Headquarters, Washington, D. C.



Contents for Week of February 5, 1934. Vol. XII. No 29.

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 4. Oregon, "The Beaver State."
 5. Melbourne, Australia, To Have Man-Made Mountain.
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© Photograph by Acme Newspictures

UP FROM THE DEPTHS!

Deep sea treasure hunting has its thrills. The camera has caught a tense moment during salvage operations on the *Egypt* as the captain's safe, held like a lump of sugar in a pair of giant tongs, is swung aboard the salvage ship *Artiglio*, off the French coast (See Bulletin No. 3).

HOW TEACHERS MAY OBTAIN THE BULLETINS

The Geographic News Bulletins are published weekly throughout the school year (thirty issues) and will be mailed to teachers for one year upon receipt of 25 cents (in stamps or money order). Entered as second-class matter, January 27, 1922, at the Post Office at Washington, D. C., under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized February 9, 1922.

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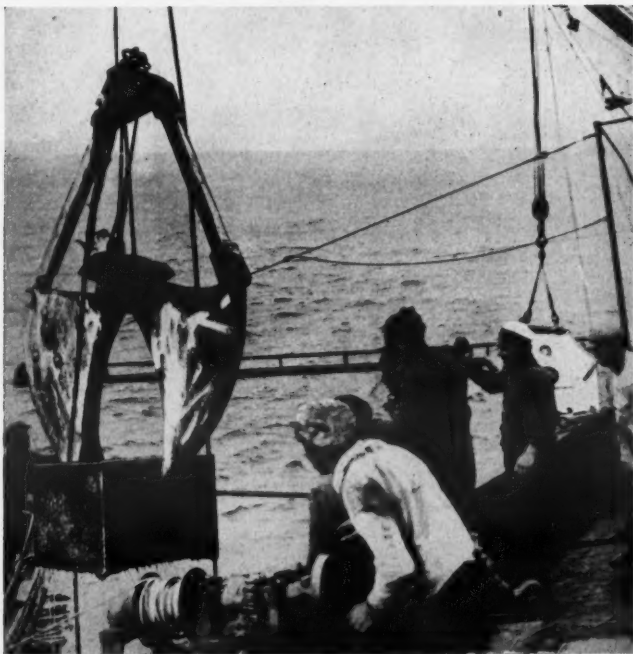
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National Geographic-U. S. Army Air Corps Flight To Seek Man's Ceiling

HOW high may a man go in a balloon? This is one of the many problems of the upper air which may be answered when two stratosphere flights are made in the United States this summer. The National Geographic Society and the U. S. Army Air Corps are joint sponsors of a project which will send a balloon with a capacity of 3,000,000 cubic feet, the largest free balloon ever built, to an estimated altitude of 15 miles above sea level.

The first ascent will be made in June by Captain Albert W. Stevens, noted aerial observer and photographer of the Army Air Corps, who conceived the project, and Major William Kepner, expert balloon pilot of the Army Air Corps. If this flight is successful, the same balloonists will make a second ascent in September, in order to check observations under similar conditions.

The flights will be known as the "National Geographic Society-Army Air Corps Stratosphere Flights." To advise in regard to the scientific plans and equipment, and to direct studies of the data collected, Dr. Gilbert Grosvenor, President of the National Geographic Society, has formed a committee of outstanding American scientists.

Advisory Committee of Scientists

Its members are: Dr. Lyman J. Briggs, Chairman, Director U. S. Bureau of Standards; Dr. F. V. Coville, U. S. Department of Agriculture, and Chairman of the Research Committee, National Geographic Society; General Oscar Westover, Assistant Chief, U. S. Army Air Corps; Captain R. S. Patton, Director, U. S. Coast and Geodetic Survey; Dr. W. F. G. Swann, Bartol Research Foundation, Franklin Institute, Swarthmore, Pa.; Dr. Floyd K. Richtmyer, Department of Physics, Cornell University, and Member Research Council, American Association for the Advancement of Science; Dr. Charles E. K. Mees, Director, Research Laboratory, Eastman Kodak Company; Dr. Charles F. Marvin, U. S. Weather Bureau; and Dr. John Oliver La Gorce, National Geographic Society.

The huge balloon to be used in the ascents will have a gas capacity five times that of the bag in which Commander Settle established his eleven-and-a-half mile record last November, and nearly three-and-a-half times that of the Soviet balloon which in September rose more than twelve miles above the earth.

The exact point at which the balloon will take to the air has not been selected, but it will probably be in the northern great plains region. Such a choice, it is pointed out, will give ample room for drift to the northeast, east, or southeast and a landing in open country, so that the bag can be salvaged.

Object is to Collect Scientific Data

The completed plans for the flights are due to the efforts of Captain Stevens, who has gathered data during the past year directed toward the use in stratosphere flights of the largest balloon which it is practicable to construct, and an ascent to the highest point to which it is believed possible for man to rise by use of a gas bag, with hope of a safe landing. The mere attainment of altitude, however, is not a primary object of the ascents. It is desired to reach the greatest attainable height above the earth in order that conditions there can be observed.

Captain Stevens has penetrated the lower levels of the stratosphere by airplane on numerous occasions and also has served as observer on a number of Army balloon ascensions. During his high altitude flying he has collected much scientific information. In a flight over Dayton, Ohio, in October, 1928, he reached an altitude of 39,150 feet and obtained the only complete record of thermometer readings ever made in America, showing on the same day the "temperature gradient" in the region from the earth to the stratosphere. Such data are extremely valuable in weather studies.

Stratosphere Air to be Brought to Earth

Another project of importance will be the trapping of generous samples of stratosphere air at several levels. These specimens will be analyzed and studied later in physical and chemical laboratories.

In order to house the many instruments and automatic recording devices that will be taken aloft, the balloon will have attached to it a spherical gondola of light metal nine feet in diameter. This diameter is two feet greater than that of the gondolas used by Professor Picard and Commander Settle, and will provide a cubic capacity more than twice as great.

The instruments, many of them designed and modified by Captain Stevens as a result of

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Photograph by Adam Warwick

FRAGRANT JASMINE PLANTS WHOSE FLOWERS FLAVOR TEA

In narrow fields bordering the tea plantations of Fukien Province, jasmine plants are trained over bamboo trellises. The white flowers are carried in baskets to the tea factories of Fookchow, where, heated with the finer grades of tea leaves, they impart a delicate and delightful flavor to the popular beverage (See Bulletin No. 2).

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Foochow, Inland Port Where U. S. Sailors Landed

FOOCHOW came into the news recently when thirty United States sailors joined landing parties of Japanese and British seamen sent to protect foreign property in this Chinese seaport, a storm center during the recent Fukien Province revolt.

Foochow lies 34 miles inland from the East China Sea, but it handles a provincial and foreign business of huge proportions. Few tourists and no cruise steamer passengers go there, but many representatives of business firms reach the city.

The deep-water anchorage of Foochow is really in its suburbs. The nearest gate in the five-mile wall that surrounds the old city is some three miles from the north bank of the Min, or Snake River, and about eight miles from the place where deep-draft vessels must discharge their cargoes.

About Midway Between Hong Kong and Shanghai

To reach Foochow one must take a steamer or sailing boat from Hong Kong or Shanghai—it lies about midway between these ports—because there are no railroads or good roads connecting it with other parts of China. Opposite the north end of Taiwan (Formosa), ocean-going vessels enter the Min and travel up the river for 25 miles to Pagoda Anchorage. From there passengers and goods are usually transferred to steam launches or lighters and brought, through a maze of matting-covered sampans and high-pooed junks to the Foochow piers in the Nantai district.

From Nantai the rest of the journey to the walled city is made by bus, taxi, jinrikisha, or sedan chair. Since 1931 a new channel, leading directly to the Nantai piers, has been dredged for steamers of 14-foot draft, or less.

Passengers landing on the south side of the river find themselves in the most modern section of Foochow—the Foreign Settlement. The foreign clubs, consular buildings surrounded by flowering gardens and well-kept lawns, the race track, and handsome office structures contrast sharply with the congested native quarter on the other side of the Min, and with the old walled city of Foochow three miles farther north.

Foochow a "Youngster" Among Chinese Cities

Ancient as Foochow seems to the western world, it is a sort of Wild West in the eyes of Peiping (Peking) or Canton. In the days of Confucius, China proper looked upon the province that now is Fukien as a region of barbarians. The walled city did not rise until the Ming period, which covered the years that America was discovered and colonized.

Tea, timber and paper fill most of the outgoing boats. From up-river come many cargoes of fruit, cotton for the Foochow mills, and rice. Piled on its wharves are wheat, peas, onions, salt, silver, white plums and dates. The overland journey to Foochow is avoided even by the natives; but the Min and its branches give the city a waterway access to twenty-seven walled towns and to many smaller villages.

Foochow imports the sap of the so-called varnish tree and uses it in a lacquer of exceptional luster. One family, for many generations, held a secret process which made Foochow lacquer ware for-famed. This process required applications a dozen or more times.

On a mountain not far from the city one encounters the dog worshippers,

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trials during high altitude flights, will be largely automatic, leaving observer and pilot free to take care of the many activities in the gondola that will require personal attention. A number of tiny cameras, using motion-picture film, will automatically and tirelessly "read" dials and clock faces at frequent intervals.

Those who have contributed to the fund to make possible the stratosphere flights are: the National Geographic Society; the United Aircraft & Transport Corporation; the Eastman Kodak Research Laboratory; the Fairchild Aerial Camera Corporation; the Sperry Gyroscope Company; William Burden, New York; Colonel Edward A. Deeds, Dayton, Ohio; Sherman M. Fairchild, New York; Phillip G. Johnson, Seattle and New York; Charles F. Kettering, Dayton, Ohio; Dr. A. Hamilton Rice, New York; Captain Albert W. Stevens, U.S.A.; Cornelius V. Whitney, New York; and George D. Widener, Philadelphia.

Note: For helpful references concerning high-altitude exploration by airplane and balloon see: "The Aerial Conquest of Everest," *National Geographic Magazine*, August, 1933; "Ballooning in the Stratosphere," March, 1933; and "Exploring the Earth's Stratosphere," December, 1926.

See also in the GEOGRAPHIC NEWS BULLETIN: "Again Man Invades the Bluish-Purple Stratosphere," week of October 23, 1933; and "'Balboa of the Air' Gets Geographic Prize," week of January 29, 1934.

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A BALLOON "FILLING STATION"

Tanks of compressed hydrogen being connected with the stratosphere balloon of Professor Auguste Piccard, the Swiss scientist who twice penetrated the stratosphere. Hydrogen will be used, also, in the proposed National Geographic-U. S. Army Air Corps flights. It is the lightest of all gases, and therefore provides the greatest lifting power. Each one thousand cubic feet of hydrogen will lift 70 pounds.

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Dutch Islands To Be Grandstands for Treasure Hunt

EARLY next spring another attempt will be made to salvage more than \$5,000,000 worth of gold and silver from the hulk of the English frigate *Lutine*, which sunk off the Dutch coast in 1799. Texel, Vlieland, and Terschelling, three sleepy little Netherland islands near the recently-enclosed entrance to the Zuiderzee, will then be often in the news columns, perhaps, because the wreck with its rich cargo of gold coin and gold bullion lies in the channel between Vlieland and Terschelling.

Many other tales of maritime adventure and warfare color the history of these sandy islands, so near yet so strangely remote from the beaten paths of commerce and trade.

In 1594 four Dutch ships, under the command of the intrepid explorer, Bar-ents, set sail from Texel in one of the first attempts ever made to discover a passage to India through the polar ice. They managed to reach the Kara Sea; but it remained for a Norwegian, Nordenskiöld, three centuries later, to navigate successfully the Northeast Passage.

Sheltered John Paul Jones

After the famous encounter between the *Bon Homme Richard* and the *Serapis*, 1779, John Paul Jones arrived at Texel with his two prizes, to the great consternation of the Dutch. The presence of the renowned "pirate" with his fleet was considered a dubious mark of distinction and greatly hindered the fishing industry. Hundreds of little fishing boats scurried back to the safety of their harbors and refused to leave until John Paul Jones, with reconditioned ships, put out to sea once more.

To-day there is little to disturb the peaceful life of the farmers and fishermen dwelling on these islands. Burg, the largest town, and the capital of Texel, has 6,400 inhabitants. Those who believe the moon to be made of green cheese would do well to consult the people of Texel, who are especially skilled in the manufacture of a cheese of this color. Green cheese, in fact, is one of Texel's leading exports.

The Island also exports sea-birds' eggs. Thousands of the eggs are collected on the northern extremity of the island, called Eierland (land of eggs), and shipped, chiefly, to the markets of Amsterdam.

Once Part of Mainland

These islands have not always enjoyed their present geographical isolation. A few centuries ago they formed part of the coast line of the mainland. Then there was no Zuiderzee; only an inland lake, named Flevo by Tacitus, which was connected with the North Sea by the River Flevum. Some think the channel between Terschelling and Vlieland formed the mouth of this river.

Breaches were gradually made in the coastal dunes, the land behind became flooded, and in the thirteenth century the waters of the North Sea found their way to Lake Flevo. The meeting of these waters formed the Zuiderzee, while stranded bits of coast line were left as island sentinels.

From Texel Roads in 1667 de Ruyter and de Witt sailed with the Dutch fleet across the English Channel, and up the Thames to London. The British capital suffered no loss of life from this flaunting gesture, but a serious blow was dealt to British pride. It was from Texel also that the Dutch fleet put to sea and engaged the English in the battle of Camperdown (1797), which cost the Dutch their fleet.

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easily recognized by the peculiar coiffure of their women—a scaffoldlike effect with a cord dangling before the face. This is worn because of a myth which holds that a dog once saved a certain Chinese city.

Tea Scented With Flower Petals

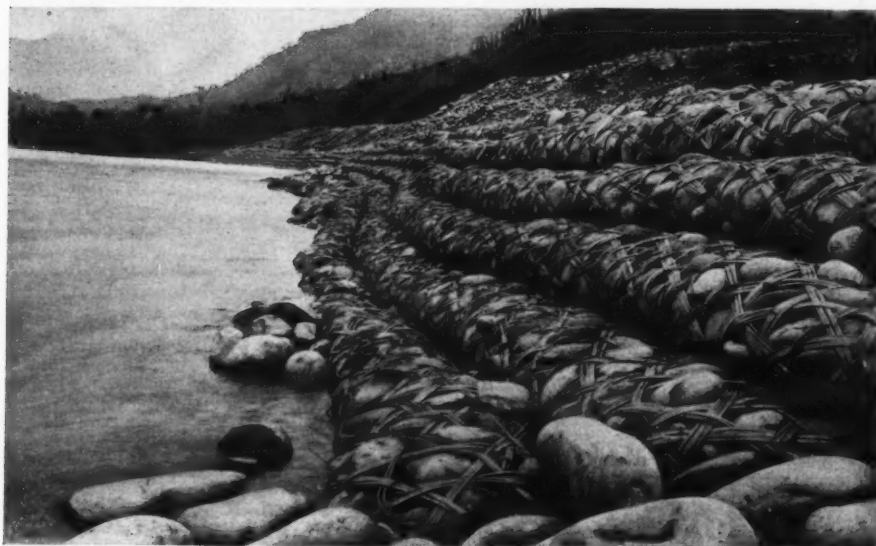
In sharp contrast to the odors of the narrow streets of old Foochow are the pleasant-smelling tea factories and warehouses where tea leaves, scented with jasmynes, roses, and chrysanthemums brought down from the hills of Fukien province (see illustration, page 2) are sorted from dawn to dusk by Chinese women and children. Foochow exports millions of pounds of Fukien tea and re-exports several additional million pounds which were shipped to Foochow "tea perfumeries." There are more than forty tea factories in the city.

Foochow also supplies much lumber from interior Fukien, and huge lumber rafts can usually be seen in the river.

Note: Students preparing projects of units about China will find other photographs and references in "The Society's New Map of Asia," *National Geographic Magazine*, December, 1933; "The Glory That Was Imperial Peking," June, 1933; "Here in Manchuria," February, 1933; "From the Mediterranean to the Yellow Sea by Motor," November, 1932; "Cosmopolitan Shanghai, Key Seaport of China" also "Macao, Land of Sweet Sadness," September, 1932; "Raft Life on the Hwang Ho," June, 1932; "How Half the World Works," April, 1932; "Byroads and Backwoods of Manchuria," January, 1932; "The Geography of Money," December, 1927; "Among the People of Cathay," June, 1927; "Farmers Since the Days of Noah," April, 1927; and "Scenes in the Celestial Republic," February, 1926.

See also in the *GEOGRAPHIC NEWS BULLETIN*: "Amoy, Tea Town That Is Center of New Chinese Revolt," week of December 18, 1933.

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Photograph from Joseph Beech

HOW CHINA KEEPS HER WANDERING RIVERS IN CHECK

Wicker nets holding boulders have been found effective in flood control work, and in dikes used to force large streams to scour out their own channels. Rubble dikes are being employed to deepen the river Min between the wharves of Foochow and the sea.

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Oregon, "The Beaver State"

THE scenic beauty, busy factories and farms, and rich historical background of Oregon, "The Beaver State," are revealed in the February, 1934, issue of the *National Geographic Magazine*. Amos Burg, author of the article, was born in Oregon on the banks of the Columbia River, and therefore writes as a native son.

With its sixty photographs, twenty-four of which are in natural color, and special two-page map of the State, the issue is of particular value to teachers and students in Oregon, but it is also of interest to classes preparing United States projects, or units on the Pacific coast.

The Oregon article is the twenty-eighth in the series of illustrated American State and City stories being published by the National Geographic Society in the *National Geographic Magazine*. Educators throughout the country have endorsed this noteworthy series as a means of acquainting the people of one State or district with the most unusual features of the life and customs of people in other States (for complete list see next page).

The Metropolis of Oregon Is Portland

After summarizing the early history of Oregon, Mr. Burg takes his readers on a swiftly-moving tour of the entire State by steamer, motor car, and pack horse. Portland, the metropolis of the Beaver State, is visited first.

"The traveler entering Portland by the Columbia and the Willamette Rivers to-day," he says, "views 29 miles of harbor frontage, lined with terminals, dock basins, grain wharves, lumber and flour mills, dry docks and shipyards, behind which the city's skyline is etched against green-clad hills. Seven bridges span the Willamette, joining the east side, which is largely residential, to the west side, which includes the business district.

"In pioneer days the Willamette Valley was the meeting place of two currents, the border Missourians, who came by the Plains, and the so-called 'Boston men,' who arrived by sea. This vanguard of empire was marooned for a generation, until the railroad was built. Portland's fine schools, its symphony orchestras, and its patronage of the arts reflect the New England ancestry, while the city's hospitality reveals the influence of the southern strain."

After describing the annual Rose Festival Week, some of the industries and the scenic beauty of the region around the "Rose City," the author travels down the valley of the Willamette, which he calls "the Nile of Oregon."

"From Portland, the broad and populous Willamette Valley extends south for 150 miles between Cascade and Coast ranges, containing, in only about 14 per cent of the area, 64 per cent of Oregon's population. Agriculture is concentrated on either bank of the river in a belt five to ten miles wide.

"Twenty-seven miles north of Salem is Champoege, the 'Plymouth Rock' of Oregon. Here, on May 2, 1843, pioneers organized the first American civil government in the northwest—an event which, during the dispute with Great Britain, helped to save Oregon for the United States.

"Salem, hub city of the Willamette Valley and capital of the State, lying 52 miles south of Portland, is the center of the largest hop-growing area in the United States and is also one of Oregon's largest fruit-canning centers. With a climate similar to that of the flax districts in Ireland, and portions of Belgium and France where flax is grown, Salem has made a persistent effort to establish a linen industry. The area grows long-fiber flax and has two linen mills."

Highway Hewn Out of Rock Walls

The author pays tribute to Oregon's splendid highway system, and in the course of his travels he motors along the Oregon Coast Highway, stopping at the beaches and resorts, and then drives east over the famous Columbia River Highway.

"The Columbia River Highway, hewn out of towering rock walls, was built with an eye to preserving the natural beauty everywhere about. Only the shrubs, ferns, and wild flowers in the exact path of the finished roadway were disturbed."

Oregonians know the Pendleton round-up well, but to outsiders it is a revelation to see the brilliant costumes, the dashing horses, and the queer tepees of the Indians, as well as the antics of the cowboys and steers.

"Pendleton was an adventure," Mr. Burg reports. "From the moment of entering the wheat metropolis during Round-Up time, one feels part of the big show. A thousand cowboys, cowgirls, Indians, and stage drivers assemble here each year, from the Rio Grande to Calgary, to enact a drama of old sports and the passing life of the frontier West.

"The Round-Up is not a commercial show but a vast community enterprise, owned by the people of Pendleton, who contribute months of work without pay.

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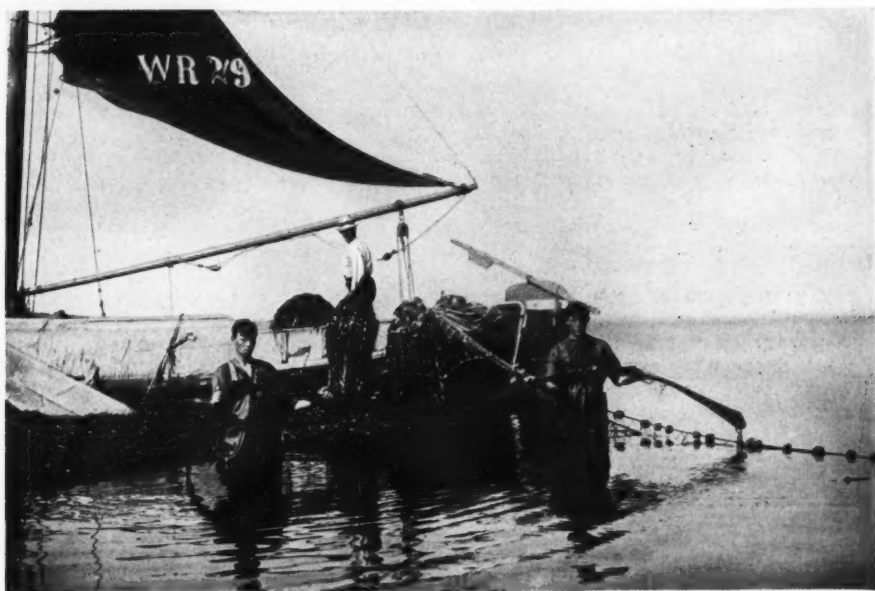
Fate of Treasure Ship a Mystery

The exact fate of the treasure ship *Lutine* has remained a mystery, as the only survivor died a few hours after reaching land. In the latter part of the eighteenth century the British were conducting a campaign in the north of Holland against Napoleon and the Dutch. Their troops had to be paid, and their interests in the town of Hamburg protected. To this end the *Lutine* was dispatched from London with gold coin and bullion believed to exceed \$70,000,000.

Soon after the disaster a part of this rich treasure was recovered, including the *Lutine* bell, which is still rung at Lloyd's, in London, to give warning of overdue ships; but all subsequent attempts at salvage have failed. The frigate has sunk deeper and deeper during the years, until to-day it is buried under more than 13 yards of sand.

Note: For other data about the Netherlands, the Zuiderzee project, and the interesting customs and costumes of this picturesque country see: "A New Country Awaits Discovery," also "Odd Pages from the Annals of the Tulip," *National Geographic Magazine*, September, 1933; "A Vacation in Holland," September, 1929; "Singing Towers of Holland and Belgium," March, 1925; "Holland's War with the Sea," March, 1923; "The Battle-Line of Languages in Western Europe," February, 1923; and "The Races of Europe," December, 1918.

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© K. Maaskant

HARVESTING ONE OF HOLLAND'S SEA CROPS

With this linked scythe of six knives a kelp or seaweed that abounds in the shallows off the Netherlands coast is cut and collected. The dried product is used for stuffing mattresses.

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Melbourne, Australia, To Have Man-Made Mountain

A MAN-MADE "mountain" is an unusual feature now being planned for the 100th anniversary of the State of Victoria, Australia, to be celebrated in Melbourne this year. It will hold particular interest for visitors from the 3,600 sections of the world that will be asked to contribute soil toward this project. Each citizen of the State also will be asked to provide one cubic foot of earth for the mountain.

In 1834, when John Batman exchanged beads and trinkets with the aborigines for 600,000 acres of land, he probably did not dream that in less than a hundred years his settlement at Port Phillip would become the seventh largest city in the British Empire and the twenty-sixth largest in the world.

Batman, assisted by the small colony under John Pascoe Fawkner, incorporated the settlements into the town of Melbourne in honor of Lord Melbourne, then Prime Minister of England. This new colony attracted people from New South Wales to such a degree that "overlanders" soon swarmed there; and in 1847, with a population of 3,511 subjects, it blossomed into a recognized city.

"The Mile Square City"

Melbourne to-day, capital of the second smallest State in the Australian Commonwealth, could be dubbed "geometric city," for it is made up mostly of angles, lines and a square. A 165,666-acre rectangle comprises "Greater Melbourne," while the city proper is known as "Mile Square City." The streets, intersecting at 660-foot intervals, form right angles. The Yarra River and Coode Canal provide additional lines.

Considered the "Queen City of the South," Melbourne deserves the title because of its impressive and massive buildings. The city was settled by "law-abiders," not convicts. Through its dignified and conservative mode of expansion, an atmosphere was created of a typical cathedral-city of England surrounded by a belt of factories.

Entering the city from the south, the traveler finds Melbourne comparable to the city of Washington. St. Kilda Road, crossing the Yarra River via Princess bridge, can stand for the Mount Vernon Boulevard crossing the Potomac over the Arlington Memorial bridge. Passing the impressive public buildings—the Houses of Parliament, Museum, the world-famous Botanical Garden, and the Public Library, which houses 350,000 volumes under the largest dome in the southern hemisphere—one finds Washington again in panorama. Melbourne's street crowds, however, shatter the illusion. Over a million 100-per-cent British subjects live in the city.

Famous Collections of Plants

The Botanical Garden lies on the south bank of the Yarra River. Covering over 100 acres, it is the mother of the 6,000 acres of parks which enhance the beauty of the city. In the Garden one is able to view nearly every plant and flower grown in the temperate and subtropical climates. The Botanical Garden's step-child, the building of the National Herbarium, houses over a million and a half sheets of dried specimens of the world's flora. Some are 700 years old.

Melbourne is the focus for a great agricultural, pastoral and mining region in the State of Victoria. The city and its suburbs have over 400 miles of electric railways, which converge on Flinders Street, at one of the busiest passenger stations in the world. In addition there are modern busses and natural and man-made water

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Ghost Towns of the Blue Mountains

"A trip into the Blue Mountains toward Sumpter will bring one to ghost towns, stamp mills, and abandoned mines, where frontier justice was meted out so swiftly that both the murderer and his victim were buried on the same day. The deserted miner's cabins are interesting as antique libraries in which newspapers printed on the awkward pioneer presses of the eighties are occasionally found in the jumbled masses of forgotten things."

In conclusion Mr. Burg takes his readers to Crater Lake. "South I drove fast and straight down the spectacular Dalles-California Highway, paralleling fresh glistening peaks which crop out of the Cascade Range. The continuous pine forests were broken by scattered lava beds lying in frozen heaps, resembling piles of clinkers dumped on the fertile ground."

"One hundred miles below Bend I branched off the main highway, through historic Fort Klamath, and climbed steadily through the south entrance of Crater Lake National Park to Crater Lake. The beauty of Crater Lake is seldom fully comprehended by the beholder gazing for the first time into its blue sea of silence. By many it has been described as possessing a bewitching charm, a touch of the supernatural, that fascinates the pilgrim to its rim."

Note: A complete list of the State and City articles, several of which are accompanied by special map supplements, and the issues of the *National Geographic Magazine* in which they appear:

Alabama	December, 1931
Arizona	January, 1929
California	June, 1929
Chicago	January, 1919
Colorado	July, 1932
Florida	January, 1930
Georgia	September, 1926
Illinois	May, 1931
Louisiana	April, 1930
Maryland	February, 1927
Massachusetts	April, 1923; March, 1920
Michigan	March, 1928
Missouri	April, 1923
New Hampshire	September, 1931

New Jersey	May, 1933
New York City	November, 1930
New York State	November, 1933
North Carolina	May, 1926
Ohio	May, 1932
Oregon	February, 1934
Pennsylvania	May, 1919
Philadelphia	December, 1932
San Francisco	April, 1932
Texas	June, 1928
Vermont	March, 1927
Virginia	April, 1929
Washington, D. C.	November, 1931
Washington State	February, 1933

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OREGON'S PORTABLE CANNERIES SOLVE A FARM PROBLEM

In some parts of the State the county supplies cans and charges 4½ cents each for canning the farmer's produce. If the farmer has no money, a percentage of the canned goods is taken.

lanes. It can readily be understood how the city with these facilities has managed to grow, since 1839, from 70 shops to 5,500 factories. Such modern transportation systems have enabled the State of Victoria to stand, in the Commonwealth of Australia, third in the production of wool, wheat, wine and livestock, second in butter and first in fruit. Many of these products are exported. The wool sent out represents 35 per cent of the total "clip" of Australia.

Politics and commerce do not rule Melbourne, even though they are the most important factors. The city has fine public schools. Education is compulsory but free from religious bonds. Thousands of students also roam the campuses of Melbourne University, Church of England Grammar School, St. Xavier's College, Scotch College, and Wesley College. Sports are extremely popular. The Melbourne Cricket Ground is a magnet for crowds during the cricket season; but in November, Henley on the Yarra—an aquatic event—is an even greater attraction.

Note: For other Australian references and photographs consult the following in the bound volumes of the *National Geographic Magazine* in your school or local library: "Men and Gold," April, 1933; "Shark Fishing—An Australian Industry," September, 1932; "Koala, an Australian Teddy Bear," September, 1931; "Great Barrier Reef and Its Isles," September, 1930; "By Seaplane to Six Continents," September, 1928; "Seeing the World from the Air," March, 1928; "Air Conquest," August, 1927; "The Columbus of the Pacific (Captain James Cook)," January, 1927; "Australia's Wild Wonderland," March, 1924; "Sailing the Seven Seas in the Interest of Science," December, 1922; "From London to Australia by Aeroplane," March, 1921; "The Geography of Games," August, 1919; "Lonely Australia; The Unique Continent," December, 1916; and "Great Britain's Bread upon the Waters," March, 1916.

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Photograph by A. Nielsen

PET KANGAROOS IN A MELBOURNE ZOO

Australia is a continent with many strange forms of life, both animal and plant. In the Botanical Garden and the National Herbarium at Melbourne are gathered specimens of nearly every plant grown in temperate and subtropical climates.

